CLAIMS

1.   An active POTS splitter adapted to separate analogue POTS signals from xDSL signals, characterised in that said active POTS splitter incorporates line testing means.

2.   An active POTS splitter as claimed in claim 1, characterised in that said testing means is adapted to transmit a test signal, or test message, to a line to be tested.

3.   An active POTS splitter as claimed in either claim 1, or claim 2, characterised in that said test signal is adapted for the performance of a specific line test.

4.   An active POTS splitter, as claimed in either claim 1, or claim 2, characterised in that said test signal is of a general form capable of use with a range of different line tests.

5.   An active POTS splitter, as claimed in claim 4, characterised in that said test signal comprises at least one pulse.

6.   An active POTS splitter, as claimed in claim 4, characterised in that said test signal comprises at least one step.

7.   An active POTS splitter, as claimed in claim 4, characterised in that said test signal comprises at least one chirp.

8.   An active POTS splitter, as claimed in claim 3, characterised in that said test signal comprises a series of sinusoidal signals of known amplitude, each signal in said series having a different frequency, said series spanning a frequency range for which a line is to be tested.

9.   An active POTS splitter, as claimed in claim 8, characterised in that each tone of said series of sinusoidal signals has a duration of a length sufficient to avoid problems associated with synchronisation and to permit a measurement to be completed within said duration.

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10.   An active POTS splitter, as claimed in any of claims 2 to 8, characterised in that said test means is adapted to transmit said test signal, or message, on receipt of a request signal.

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11.   An active POTS splitter, as claimed in claim 10, characterised in that a test facilitated by said test means is initiated at a predetermined time interval after receipt of a request signal by said test means.

12.   An active POTS splitter, as claimed in any of claims 2 to 11, characterised in that said test means is adapted to transmit said test signal, or message, automatically.

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13.   An active POTS splitter, as claimed in claim 12, characterised in that said test means is adapted to transmit said test signal, or message, in accordance with a predetermined schedule.

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14.   An active POTS splitter, as claimed in any previous claim, characterised in that said test means has a unique identity code, and in that said test means is adapted to transmit said unique identity code whenever a test signal, or message, is transmitted, or whenever an identification request signal is received.

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15.   An active POTS splitter, as claimed in any previous claim, characterised in that said test means is adapted to short-circuit a line.

16.   An active POTS splitter, as claimed in any previous claim, characterised in that said active POTS splitter, including said test means, is implemented as a single chip.

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17.   An active POTS splitter, as claimed in claim 16, characterised in that said

chip is mounted on a PCB connected to a line jack adapted for direct insertion into a customer premises line socket.

18.   In a telecommunications system adapted to employ xDSL and POTS, and comprising at least one central office connected to a plurality of subscribers by subscriber lines, a method of measuring quality parameters relating to xDSL transmission on a subscriber line, characterised by the steps of:

- generating a test signal on said subscriber line at a subscriber's premises;

- performing measurements at said central station on said test signal as received at said central station; and

- deriving quality parameters for said subscriber line from said measurements.

19.   A method, as claimed in claim 18, characterised by generating said test signal by causing said subscriber line to change from a high impedance state to a low impedance state.

20.   A method as claimed in claim 19, characterised by generating said test signal by causing a telephone to switch from an "on-hook" state to an "off-hook" state.

21.   In a telecommunications system adapted to employ xDSL and POTS, and comprising at least one central office connected to a plurality of subscribers by subscriber lines, each subscriber premises being equipped with a POTS splitter, a method of measuring quality parameters relating to xDSL transmission on a subscriber line, characterised by the steps of:

- said POTS splitter generating a test signal on said subscriber line;

- performing measurements at said central station on said test signal

as received at said central station; and

-       deriving quality parameters for said subscriber line from said measurements.

22.   A method, as claimed in claim 21, characterised by said test signal being adapted for the performance of a specific line test.

23.   A method, as claimed in claim 21, characterised by said test signal being of a general form capable of use with a range of different line tests.

24.   A method, as claimed in claim 23, characterised by said test signal comprising at least one pulse.

25.   A method, as claimed in claim 23, characterised by said test signal comprising at least one step.

26.   A method, as claimed in claim 23, characterised by said test signal comprising at least one chirp.

27.   A method, as claimed in claim 22, characterised by said test signal comprising a series of sinusoidal signals of known amplitude, each signal in said series having a different frequency, said series spanning a frequency range for which a line is to be tested.

28.   A method, as claimed in claim 27, characterised by each tone of said series of sinusoidal signals having a duration of a length sufficient to avoid problems associated with synchronisation and to permit a measurement to be completed within said duration.

29.   A method, as claimed in any of claims 21 to 28, characterised by transmitting said test signal, or message, on receipt of a request signal.

30.   A method, as claimed in claim 29, characterised by initiating a test at a

predetermined time interval after receipt of a request signal.

31.   A method, as claimed in any of claims 21 to 30, characterised by transmitting said test signal, or message, automatically.

32.   A method, as claimed in claim 31, characterised by transmitting said test signal, or message, in accordance with a predetermined schedule.

33.   A method, as claimed in any of claims 21 to 32, characterised by each POTS splitter having a unique identity code, and by transmitting said unique identity code whenever a te as claimed in any of claims 21 to 33, characterised by generating said test signal by short-circuiting a line.

34.   A method, as claimed in any of claims 18 to 34, characterised by collecting and storing results obtained from line tests at said central office and deriving a log of line condition for each subscriber line therefrom.

35.   A method, as claimed in any of claims 18 to 34, characterised by collecting and storing a plurality of results obtained from line tests at said central office and averaging said plurality of results to obtain a composite result for each subscriber line.

36.   A telecommunications system adapted to employ POTS and xDSL, comprising at least one central office connected to a plurality of subscriber premises by subscriber lines, at least some of said subscriber premises having a POTS splitter located therein, characterised in that said POTS splitter is a POTS splitter as claimed in any of claims 1 to 17.

37.   A telecommunications system adapted to employ POTS and xDSL, comprising at least one central office connected to a plurality of subscriber premises by subscriber lines, at least some of said subscriber premises having a POTS splitter located therein, characterised in that said POTS splitter is adapted to measure subscriber line quality in accordance with the method claimed in any of claims 18 to 36.